

## Claims

What is claimed is:

1. A high strength stringed musical instrument neck, which is constructed so that the tension from a plurality of strings acting upon it in singular plane is controlled and redirected by a monocoque outer structure as an opposing force to the tension imposed by the plurality of strings, and improved method of construction comprising:

a length of hard wood shaped as the instruments neck; and

two separate strengthening beams made from graphite and epoxy resins and, adhesively securing said beams to and within the wood; and

one external strengthening shell made from carbon cloth and epoxy resins, and adhesively securing said shell to the wood and both beams inclusive; and

a fingerboard adhesively secured to the assembly, and

a two way truss rod assembly

2. A high strength stringed musical instrument neck, wherein both strengthening beams are made from graphite in epoxy resins and one of which is in the form of a flat plate and the other is in the form of a rectangular rod and each having a generally flat bottom and top surface.

3. A high strength stringed musical instrument neck, wherein the external strengthening shell is made from a plurality of layers of carbon cloth cast in epoxy resins and formed upon a mold and the weave of said cloth is disposed at an angle of 45 degrees to the longitudinal axis of said mold to form an external truss structure and having a semi-elliptical cross sectional shape.

4. A high strength stringed musical instrument neck comprising the steps of:

providing a structural length of hard wood shaped as the instruments neck; and

providing two graphite strengthening beams; and

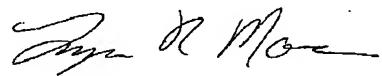
machining the length of hard wood to accept the installation of said beams; and

adhesively securing said beams; and

providing an external carbon fiber strengthening shell; and  
adhesively securing said shell to the wood and both beams inclusive; and

providing a two way truss rod, and

providing a fingerboard and adhesively securing it to the assembly.

A handwritten signature in black ink, appearing to read "Lynn D. Mace".